DESIGN PANEL NO. 23 - 7-3-97

SYSTEM MESSAGE OVERVIEW - Jack Raucci

OVERVIEW

System Messages consist of the following distinct CSCs:

- Message Catalog Services
  This CSC is primarily responsible for giving the user the ability to create messages to be stored in an SDC repository. In addition, this CSC creates an Indexed Message File that System Load is responsible for loading on the various HCI(s).
- System Message Services
  This CSC is primarily responsible for providing an API for applications who wish to have a system message displayed on the HCI(s).
- System Message Viewer
  This CSC is primarily responsible for displaying the various system messages in the respective System Message Viewers.

ISSUES

- "SMS will provide an API to send messages from any workstation application specified by platform name", is being challenged by System Design.
  Jack Raucci

ACTION	ACTIONEE	DUE DATE	STATUS

No action required.

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SYSTEM MESSAGE VIEWER

System Message Viewer was not presented at this Design Panel. This CSC is being reviewed outside of the Design Panel by a team of users and developers to achieve the best design for Redstone and the necessary foundation put in place for future deliveries.

ACTIONS	ACTIONEE	DUE DATE	STATUS

No action required.

DESIGN PANEL NO. 23 - 7-3-97

SYSTEM MESSAGE CATALOG SERVICES (MCS) - Jack Raucci

OVERVIEW

Message Catalog Services is responsible for providing an environment where users can define and manage messages that are eventually displayed in the RTPS environment.

Message Catalog Services provides a GUI interface that allows users to create and/or modify system messages, application messages and user application messages that will be stored in an SDC message catalog.

Message Catalog Services also creates an indexed message file from the SDC message catalog. As part of System Load, the indexed message file gets loaded on the HCI(s) that will allow for easy and improved access of the message in the real-time RTPS environment. This indexed message file will contain both system and application messages.

Messages Catalog Services also creates an indexed message file from the SDC message catalog for user application messages. This indexed message file will become part of the TCID.

ACTIONS	ACTIONEE	DUE DATE	STATUS
GUI Message Form Requirements number 11 and 12 is being challenged. The ramifications of increasing these parameters needs to be investigated.	Jack Raucci	7-10-97	
Catalog Services with respect to how messages are managed as part of the configuration method of Post Redstone CM processing of System Messages needs to be defined.	Jack Raucci	7-10-97	

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SYSTEM MESSAGE SERVICES (SMS) - Jack Raucci

OVERVIEW

System Message Services is an integrated service which provides applications the ability to send and receive system and application message packets across the network. System Message Services executes on the CCP, DDP, and HCI platforms. System Message Services receives messaging information from the calling application and forwards this message packet information for creating the textual message for display on the workstations. The message packets are logged to the SDC Recording Facility. System Message Services minimizes network traffic by using a central Message Catalog, which contains the entire CLCS Message Repository. The message body (i.e., actual text message) is not transmitted. The catalog is referenced to obtain information associated with each message at the destination.
To send messages, applications call the SMS **SMS_Send_Message API** and supply parameters to uniquely describe the message characteristics.

System Message Services also provides the capability to retrieve system and application messages from the SDC Recording Facility. System Message Service provides a programmatic interface application can utilize for retrieving messages from the SDC Logging Facility.

ACTIONS	ACTIONEE	DUE DATE	STATUS

No actions required.

DESIGN PANEL NO. 23 - 7-3-97

GATEWAY COMMON SERVICES CSCI - Jose Marin

OVERVIEW

The Gateway Common Services CSCI provides the essential functions to make any CLCS gateway operational. It is resident in the Gateway Control Processor (GCP). The Gateway Common Services CSCI is composed of multiple concurrent tasks that perform individual functions in order to support all the resources in the Gateway.

ACTIONS	ACTIONEE	DUE DATE	STATUS
The current Gateway Services does not support a Data Acquisition Start mode is not separate from the operational mode in the Redstone delivery. This capability will be provided in THOR.	Jose Marin	THOR	

Time Format Consistency Across CLCS:
A decision was made that all time formats be the same as the current CCMS format.

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DATA DISTRIBUTION AND PROCESSING CSCI DATA HEALTH CSC - Cecilia Chen

OVERVIEW

Data Health is the term applied to the integrity and validity of a Function Designator (FD) value which is being distributed from a CLCS subsystem. The health of an FD may represent the state of a hardware component, a communication path, result data from a Fusion operation, or application data. The boundaries of the data health measurement are the sending of the data by a component at one end of the data path and the receiving of data by a component at the other end. The status of the Data Health bit, as valid or invalid, determines the usability of the data.

The Data Health CSC is the software component that applies health status to each FD processed by the DDP, and provides the health status to applications at the HCI and CCP via Data Distribution.

Each FD received from the gateway is accompanied with status described by two bits, a failure bit (Sf), and a warning bit (Sw). When the failure bit is set, it indicates that the FD value should be ignored. When the warning bit is set, it indicates that the validity of the FD is questionable, and that an operator or engineer intervention/ decision may be needed.

The following examples of conditions that can set reason codes:

- Set to failure condition (ENGF) or warning condition (ENGw) by an engineer.
- Set to warning condition (DP) by the Data Health Manager based on application request.
- Set to warning condition (ADVISORY) by an Artificial Intelligence Application.

After any additional condition is applied to an FD, the Data Health Manager will compute the resultant health of the FD based on the gateway status and the current health conditions of the FD. Computation is done by OR'ing the Gateway failure bit with the failure conditions, and OR'ing the Gateway warning bit with the conditions. The resultant health, which will be represented by two Health bits (Hf and Hw), will be incorporated into Data Distribution, which will subsequently be distributed to all platforms, and made available for application access via FD Services.

ACTIONS	ACTIONEE	DUE DATE	STATUS
No Actions required			

DESIGN PANEL NO. 23 - 7-3-97

ROBUST WEB INTERFACE PATHFINDER REQUIREMENTS AND DESIGN - Tom Beever

OVERVIEW

The Robust Web Interface (RWI) supports the Graphical User Interface (GUI) development for the CAP 104,145,134 and 135 applications which run on the SDC. The GUI will provide access to the CAP programs via the Business and Information Network (BIN) on the Checkout and Launch Control System (CLCS) or an office workstation running a Web browser. CAP 104, 145,134 and 135 are the initial CAP applications to be converted, others will follow after Redstone.

ACTIONS	ACTIONEE	DUE DATE	STATUS
No Actions required			

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Local Logging Services, Initialization and Termination Services, Display Services, are **"AS IS"** ports from the Mission Control Center. These services will be scrutinized for adequacy of meeting CLCS requirements and dispositioned during the THOR delivery as a specialized task team.